

Application No.: 10/690,565

Amendments to the Claims:

This listing of the claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1 (Currently Amended): A substrate cleaning device comprising:
a substrate holder to hold an edge of a substrate;
a plurality of heat sources opposite to and separated from a surface of said substrate with a gap, each used for heating or cooling;
a temperature controller provided to control a temperature of said plurality of heat sources to allow said plurality of heat sources to be set at different temperatures independently of each other; and
a cleaning liquid filling section disposed within a through hole provided to extend vertically through a center of said plurality of heat sources for filling said gap with a cleaning liquid via said through hole, wherein
said plurality of heat sources each have a surface opposite to said substrate along a different concentric circle,
the temperature of the surface of said substrate in contact with said cleaning liquid that fills said gap is increased or decreased via said cleaning liquid through a heating or cooling operation of said plurality of heat sources.

2 (Canceled)

3 (Original): The substrate cleaning device of claim 1, wherein said substrate holder is rotated about a center of said substrate and causes said substrate to rotate.

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4 (Original): The substrate cleaning device of claim 1, wherein said substrate holder is a plurality of chuck pins, and said substrate is in contact with said chuck pins only.

5 (Original): The substrate cleaning device of claim 1, wherein said heat sources include a Peltier device.

6 (Original): The substrate cleaning device of claim 4, wherein said chuck pins are formed of resin.

7 (Original): The substrate cleaning device of claim 6, wherein said resin includes polyvinyl chloride or polychlorotrifluoroethylene.

8 (Withdrawn): A method for manufacturing an electronic device comprising the step of etching a surface of a substrate using a substrate cleaning device including:

a plurality of heat sources, each used for heating or cooling;

temperature provided to control a temperature of said plurality of heat sources to allow said plurality of heat sources to be set at different temperatures;

substrate holder to hold a substrate, separated from said heat sources with a gap, and being opposite to said heat sources; and

liquid filler provided to fill said gap with liquid.